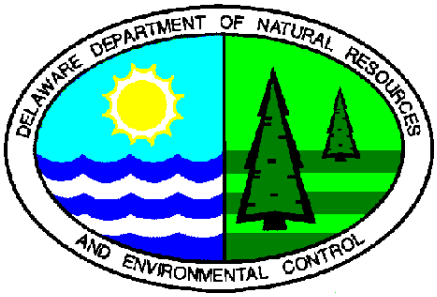


APPLICATION FOR A COASTAL ZONE ACT PERMIT

State of Delaware
Department of Natural Resources & Environmental Control
Office of the Secretary

1/22/2018

- Revision#1 - 2/8/2017 based on RAS Meeting comments
- Revision#2 3/30/2018 Based on Email from Susan Love dated 3/29/2018
- Revision#3 4/2/2018 Based on Email from Susan Love dated 4/2/2018

Lambson Plant
Essential Mineral LLC
901 A/B Lambson Lane
New Castle, DE 19720
Tim Layton

Table of Contents

Permit Application Instructions

1. Complete all parts of the application. For sections which are not applicable to your project, do not leave blank; present a statement that clearly states why the section is not applicable to your project.

2. Because all applicants' projects are different, this word document template will provide you flexibility for needed space to answer the questions. Please insert additional lines for text where needed for your application. If appropriate, attach extra pages referencing each answer by the corresponding section and question number.

3. Submit eight complete hard copies of the permit application to:

   Office of the Secretary
   Department of Natural Resources & Environmental Control
   State of Delaware
   89 Kings Highway
   Dover, DE 19901

   In addition to the eight hard copies, submit a complete electronic "pdf" copy of the permit application and a copy of the Offset Matrix in Microsoft Word format on cd-rom.

4. Comply, if required, or as requested by the DNREC Secretary, with 7 Delaware Code, Chapter 79, Section 7902. If requested, but not completed, your application will not be considered administratively complete until this form is reviewed.

5. Be sure to include your permit application fee of $3,000; otherwise the application will not be considered administratively complete. Make checks payable to the "State of Delaware."

6. Be advised that the application for a Delaware Coastal Zone Act Permit is a public document, which may be displayed at DNREC offices, public libraries, and the web, among others. If this application requires you to place confidential information or data in the application to make it administratively complete, note the Delaware Freedom of Information Act (29 Delaware Code, Chapter 100) and DNREC's Freedom of Information Act Regulation, Section 6 (Requests for Confidentiality), for the proper procedure in requesting confidentiality.

Note: This application template was last revised by DNREC on January 30, 2008. Please discard any previous versions.

PART 1

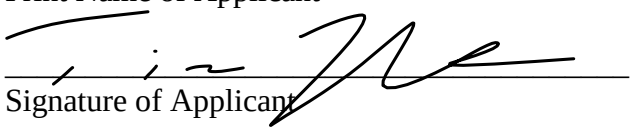
CERTIFICATION BY APPLICANT

Under the penalty of perjury pursuant to 11 Delaware Code §1221-1235, I hereby certify that all the information contained in this Delaware Coastal Zone Act Permit Application and in any attachments, is true and complete to the best of my belief.

I hereby acknowledge that any falsification or withholding of information will be grounds for denial of a Coastal Zone Permit.

I also hereby acknowledge that all information in this application will be public information subject to the Delaware Freedom of Information Act, except for clearly identified proprietary information agreed to by the Secretary of the Department of Natural Resources & Environmental Control.

Tim Layton
Print Name of Applicant


Signature of Applicant

Chief Operating Officer
Title

1/22/2018
Date

PART 2

APPLICANT INFORMATION AND SITE IDENTIFICATION

2.1 Identification of the applicant:

Company Name: ***Essential Minerals LLC***
Address: ***901 A/B Lambson Lane New Castle DE, 19720***
Telephone: ***480-235-4735***
Fax: ***TBD***

2.2 Primary contact: Please list the name, phone number and email of a preferred contact within your company in case the DNREC needs to contact you regarding this permit application.
Tim Layton
480-235-4735
laytont@essentialminerals.com

2.3 Authorized agent (if any): ***Not applicable since we are submitting ourselves***

Name:
Address:
Telephone:
Fax:

If you have an authorized agent for this permit application process, provide written authorization from client for being the authorized agent.

2.4 Project property location (street address):

901 A/B Lambson Lane

New Castle, DE 19720

2.5 In a separate attachment, provide a general map of appropriate scale to clearly show the project site. ***See attached site drawing.***

2.6 Is the applicant claiming confidentiality in any section of their application?
No
If yes, see instructions on page 3.

PART 3

PROJECT SUMMARY

Provide a one-page summary describing the proposed project. Include a brief quantitative description of the anticipated environmental impacts, and how the Environmental Offset Proposal will "clearly and demonstrably" more than offset any negative impacts.

The manufacturing process is 100% closed loop consisting of the following systems; raw material transfer, fine product grinding, product storage and packaging systems. Annual throughput is expected to be 15,000 (year one) up to 60,000 tons.

Given the nature of the grinding and transfer equipment noise will be generated by the machinery. To mitigate the sound levels all noisy equipment will be installed in the building or in a sound enclosure building, if required acoustical blankets and/or special acoustical walls will be used directly on the or around the noisy equipment to reduce to acceptable levels. Examples include putting sounds enclosures around loud blowers/compressors and installing special noise damping walls system around larger equipment to contain transient noise.

The finished product being manufacturing is a fine powder therefore will require several dust collections systems to contain the dust. Therefore, any dust generated by the production process will be 100% contained within the system as finished product. As a result, there will be no dust emissions or water discharges. The table in 6.1 shows the annual dust emission generated within the process. Based on feedback from the state dust loading to the control devices was required to be reported as an emission however it all 100% contained within the processing equipment and therefore no environmental emission will occur under normal operating conditions. Each of the closed loop processes will have duct collections systems to contain the dust and prevent from entering the surrounding areas while processing. The dust collection systems consist of large enclosed housings known as baghouses or dust collectors. The housings are filled with large fabric bags with exhaust fans used to draw the dust into the housings by generating high negative pressures with the processing systems. The building itself will have large fans installed to draw in filtered outside air in while maintaining and exhausting air through large filters at the outlets keeping transient dust 100% contained. Process upsets can/may occur so when they do the large building fans will facilitate 100% containment of the dust until the equipment can be shut down and repaired. Given our products are produced for food consumption the dust is not a threat to the surroundings areas if/when an upset occurs. The product is high purity limestone used in food and pharmaceutical products.

The process will use a natural gas air heater to generate heat needed for the process. We have procured energy offset credits from the state to more than offset the emissions generated by the natural gas fired air heater. We have agreed to procure 3 credits to offset the effects of the air heater emissions with Department of State Division of Small Business, Development & Tourism. See table air quality emissions table 6.1.

The raw material and finished product is calcium carbonate (AKA Limestone) with nothing but water added during the manufacturing process. It is brought in via supersacks for processing at the plant. Calcium Carbonate is a naturally occurring mineral that will be processed at the plant be reducing the particle size of the material from 2" minus rock to powder (40 microns or less).

PART 4

PROJECT PROPERTY RECORD AND EVIDENCE OF LOCAL ZONING AND PLANNING APPROVAL

PROJECT PROPERTY RECORD

4.1 Name and address of project premises owner(s) of record:
Lambson Lane Associates, LLC. C/O S.C. Herman & Associates 1120 Vermont Avenue N.W. Suite 900 Washington, D.C. 20005

4.2 Name and address of project premises equitable owner(s):
Sylvan C. Herman C/O S.C. Herman & Associates 1120 Vermont Avenue N.W. Suite 900 Washington, D.C. 20005

4.3 Name and address of lessee(s):
Steve Stamas
8305 Taylor Road#400
Reynoldsburge, OH 43068

4.4 Is the project premises under option by permit applicant? ***Yes***

4.5 What is the present zoning of the land for this entire project site? ***Industrial***

EVIDENCE OF LOCAL ZONING AND PLANNING APPROVAL

(The County of New Castle Land Use Department Generated an approval letter for the Essential Minerals Project. The letter was sent over to Kevin Coyle on 2/2/2018). The letter has also been attached in this document for reference.

I, _____, for _____
(Name of County, City of Town)

do hereby affirm that the project proposed by_____
(Name of Applicant)

located at _____, in
(Address)

the _____ zoning district is in

full compliance with the zoning code as it applies to this project.

The above named applicant's project is in compliance with the adopted comprehensive development plan for the geographic area within which the project will be located.

_____
(Signature)

_____
(Title)

_____
(Date)

This part is essential for a complete Coastal Zone Act Permit Application. No application will be considered administratively complete without it. While the applicant is strongly advised to use this form, the local zoning jurisdiction may utilize a different form or document to demonstrate "evidence of local zoning approval," provided such documents are signed and dated by the proper official.

PART 5

PROJECT OPERATIONS

5.1 Describe the characteristics of the manufactured product and all the process and/or assembly operations utilized by the proposed project. Include in the description (use attachments if necessary):

a. the raw materials, intermediate products, by-products and final products and characteristics of each. Review any materials' risk of carcinogenicity, toxicity, mutagenicity and/or the potential to contribute to the formation of smog. Provide material safety data sheets (MSDS) if available;
The raw material is limestone ore shipped in supersacks via trucks to the plant. All intermediate products are stored in hoppers/silos/bags. The product is limestone and has nothing added therefore isn't a risk as environmental contaminate. See attached SDS.

b. the step-by-step procedures or processes for manufacturing and/or assembling the product(s). Provide a flow diagram to illustrate procedures; ***The plant will receive limestone ore (1-1/2" minus material) stored in super sacks via flatbed truck deliveries. The super sacks will be stored in the existing warehouse areas. The super sacks will then be transferred via a vibrating tube feeder from inside the building to a bucket elevator outside the building and discharged into a 1,100 cubic foot feed silo. Note the entire transfer process in closed loop and had full dust collection (negative pressure on the systems). The ore feed from the silo will then be used to feed a grinding mill (inside the building) where the material will be reduced to a fine powder and heated to ~390 degrees F (again the grinding system is 100% closed loop circuit with dust collection and negative operating pressures. The material in the grinding system is heated to 390 degree F using a natural gas fired air heater. The product will then be pneumatically transferred to one of the two 4,100 cubic foot finished product silos located outside the building. The material will then be transferred to one of two packaging lines (inside the building) via a pneumatic conveying line and be packaged into 50 pound bags or supersacks 1,000 – 3,000 pounds. The packaged product will then be stored in the warehouse. The packaged material will then be shipped in van trucks to customers/distributors. See attached process flow diagram***

c. the nature of the materials mentioned above in 4.1(a) as to whether or not the materials require special means of storage or handling; ***No special requirements for storage or handling. See SDS for details.***

d. list the machinery (new and/or existing) to be utilized by this project;

Equipment List – Lambson Plant

Super Sack Unloading Station#1
Super Sack Unloading Station#2
Vibration Tube Feeder (Mill Feed Silo)
Bucket Elevator
Magnet - Bucket Elevator Discharge
Mill Feed Silo (1,100 CU/FT3)
Live Bottom Bin Mill Feed Silo
Mill Feed System Dust Collector
Mill Feed System Dust Collector Fan
Vibrating Tube Feeder to Mill
Mill System
Mill System Fan
Mill Classifier
Air Heater (Natural Gas Fired)
Mill System Cyclone#1
Mill System Cyclone#2
Cyclone#1 Discharge Flap Valve
Cyclone#2 Discharge Flap Valve
Mill System Dust Collector
Mill System Dust Collector Fan
Mill System Dust Collector Discharge Rotary feeder
Mill System Transfer Screw Conveyor
High Temperature Magnet Mill System
Mill System Autos ampler
Mill Air Swept Rotary Feeder
Mill Pneumatic Conveying Blower
6" Butterfly Valve Finished Product Silo#2
6" Butterfly Valve Finished Product Silo#1
Finished Product Silo#1 (4,100 Cu/ft3)
Finished Product Silo#2 (4,100 Cu/ft3)
Finished Product Dust Collector
Roller Mill Finished Product Dust Collector
Finished Product Dust Collector Fan
Roller Mill Product Dust Collector Fan
Finished Product Silo#1 Live Bin
Finished Product Silo#2 Live Bin
Finished Product Silo#1 Maint. Gate
Finished Product Silo#2 Maint. Gate
Finished Product Silo#2 Slide Gate
Finished Product Silo#1 Slide Gate
Finished Product Silo#1 Rotary Feeder
Finished Product Silo#2 Rotary Feeder
Packaging Pneumatic Conveying Blower
Dust Collector Butterfly Valve
Dust Collector Butterfly Valve
Packaging Screener

Cyclone/Receiver with Discharge Rotary Valve – Super sacking line
Hopper/Receiver Discharge Rotary Valve – 50 pound bagging line
Magnets
Metal Detector
Dust Collection Butterfly Valve
Dust Collection Butterfly Valve
Supersack Bagging Equipment - roller/belt conveyors, metal detector, bulk bag filler and magnets
50# Bagging Equipment - Packer 50# bags, Belt/roller conveyors, Blowers, metal detector, magnets, bag palletizer and stretch wrapper
Compressed Air System Compressor, pressure vessel and dryer

e. list any new buildings or other facilities to be utilized; ***The site will have a small building installed on the north side to house some equipment along with three silos and a bucket elevator.***

f. list the size and contents of any anticipated aboveground or underground storage tank systems that may be constructed or utilized in support of facility operations*;* ***For storage of feed limestone and finished product limestone 4,100 Cubic Foot silos that are ~ 50' tall and one smaller 1,100 cubic foot around 30' tall. There will also be a bucket elevator installed adjacent to the 40' tall silo around 50' tall.***

g. if this project represents an increase or decrease in production at an already existing facility, what will be the new rate of maximum production? ***No this is new production for the site.***

h. if this project represents a totally new facility at a new or existing site, what will be the maximum production rate***? Existing site with new manufacturing process with a capacity of 60,000 tons annually.***

5.2 Describe daily hours of plant operations and the number of operating shifts. ***The shifts will be typically Monday – Friday 6AM to 6PM. Nights and weekends as needed to meet customer demands.***

5.3 Provide a site plan of this project with: ***See attached site plan with required information outlined below.***

a. a north arrow;

b. a scale of not less than one inch to 200 feet;

c. identity of the person responsible for the plan, including any licenses and their numbers;

d. the acreage of the applicant's entire property and acreage of the proposed project;

e. property lines of entire property;

f. lines designating the proposed project area for which application is being made, clearly distinguished from present facilities and operating areas (if any);

g. existing and proposed roads, railroads, parking and loading areas, piers, wharfs, and other transportation facilities;

h. existing water bodies and wetlands and proposed dredge and fill areas, and;

i. existing and proposed drainage ways, gas, electric, sewer, water, roads, and other rights-of-way.

5.4 How many acres of land in total are required for this proposed project?

Existing/ currently utilized/ developed land: _____***Existing land with an existing ~82,000 SF building on ~3.0***_____acres.

New land: _____***0***_____acres.

5.5 Has the property been involved with a state or federal site cleanup program such as Superfund, Brownfields, HSCA Voluntary Cleanup Program, RCRA Corrective Action, Aboveground or Underground Storage Tank Cleanup Programs? If so please specify which program. ***No, per the owners the site hasn't been involved in any of the above items.***

5.6 With regards to environmental cleanup actions, has a Uniform Environmental Covenant, Final Plan of Remedial Action, or no further action letter been issued by the Department? If so are the planned construction activities consistent with the requirements or conditions stated in these documents? ***Not applicable since the site has not had any issues per the owners.***

PART 6A

ENVIRONMENTAL IMPACTS
Air Quality

6.1 Describe project emissions (new, as well as any increase or decrease over current emissions) by type and amount under maximum operating conditions: ***Please note all calculation below are based on maximum operating conditions and full capacity of the plant (operating at full capacity for a solid year). Year one is projected to operate 6 times less than what has been reported in the tables below. The limestone dust emission calculations were based on dust loading to the process dust collectors (emission control devices) based on a maximum tonnage throughput of 60,000 tons per year. However, this isn't an emission that will occur outside the process and therefore the dust will be 100% reclaimed back into the process. This needed to be reported as an emission per the air Quality department based on the loading of the control devices. Therefore, no offset is required given there isn't any emission to the environment.***

The natural gas combustion emissions were calculated based on air heater operating at full capacity of the heater 5 Million BTU's at maximum throughput in the plant of 60,000 tons annually. Emissions outlined in the table below are calculated based on engineering combustion tables when burning natural gas.

Pollutant	Existing Emissions		Net Increase/Decrease		New Total Emissions		Percent Change (compare tons/year)
	Lbs/day	*Tons/year*	*Lbs/day*	*Tons/year*	*Lbs/day*	*Tons/year*	
Limestone Dust (100% reclaimed in process and will not be an emission to the environment)	0	0	33,000	6,000	33,000	6,000	100%
Natural Gas Combustion Emissions							
CO	0	0	0.001728	0.63	0.001728	0.63	100%
CO2	0	0	2.465754	900	2.465754	900	100%
Methane	0	0	0.0000477	0.0174	0.0000477	0.0174	100%
N2O	0	0	0.00004602	0.0168	0.00004602	0.0168	100%
NH3	0	0	0.000066	0.024	0.000066	0.024	100%
NOX	0	0	0.002052	0.75	0.002052	0.75	100%
PART	0	0	0.000156	0.057	0.000156	0.057	100%
PM-10	0	0	0.000156	0.057	0.000156	0.057	100%
PM2.5	0	0	0.000156	0.057	0.000156	0.057	100%
SO2	0	0	0.00001314	0.0048	0.00001314	0.0048	100%
VOM	0	0	0.001134	0.414	0.001134	0.414	100%

6.2 Describe how the above emissions change in the event of a mechanical malfunction or human error. ***The process systems are immediately shutdown and the emission goes away on the limestone dust. Air Heater is immediately turned off and all emissions stop immediately***.

6.3 Describe any pollution control measures to be utilized to control emissions to the levels cited above in 5.1. ***Baghouses used to collect dust from the process and is recycled back into the finished product.***

6.4 Show evidence that applicant has, or will have, the ability to maintain and utilize this equipment listed in 5.3 in a consistently proper and efficient manner. (For example, provide college transcripts and/or records of training courses and summary of experience with this pollution control equipment of person(s) responsible for pollution control equipment, and/or provide copies of contracts with pollution control firms to be responsible for maintaining and utilizing this equipment.) ***The Chief Operating Officer has over 20 years' experience operating the equipment above in several different applications and various sites throughout his career. All operations of the site will fall under his direct leadership. Resume can be sent over if required.***

Water Quality

6.5 Describe wastewater discharge (new, as well as any increase or decrease over current discharge levels) due to project operations: *None at present time and none for this project.*

Pollutant	Current Discharge Concentration (ppm)	New or Changed Discharge Concentration (ppm)	Current Discharge		Net Increase/Decrease		New Total Emissions	
			Lbs/day	*Tons/year*	*Lbs/day*	*Tons/year*	*Lbs/day*	*Tons/year*
None								

6.6 Describe the current method of employee sanitary wastewater disposal and any proposed changes to that system due to this proposed project. *Discharges to sanitary sewer system.* ***No changes will be made to sanitary sewer system since the process doesn't have any waste water discharge requirements.***

6.7 Identify the number, location, and name of receiving water outfall(s) of any and all process wastewater discharge (new or current) affected by this proposed project. Provide NPDES Permit Numbers for each discharge affected. ***The process associated with this project doesn't have any process wastewater discharges.***

6.8 If any effluent is discharged into a public sewer system, is there any pretreatment program? If so, describe the program. ***No pretreatment required. The onsite lab used to test finished products will discharge 2-3 pounds of fine powder (The median particle size is ~10-22 microns) down the sinks of the lab each day. The product is Limestone (Calcium Carbonate) and has no negative effects to sanitary sewer systems given the expected daily amounts.***

6.9 Storm water:

a. Identify the number, location, and name of receiving waters of storm water discharges. Provide permit number for each discharge. ***The site doesn't currently have a storm water discharge permit per the owner.***

b. Describe the sources of storm water run-off (roofs, storage piles, parking lots, etc). ***Roofs and parking lots.***

c. Describe the amount of storm water run-off increase over current levels that will result from the proposed project. ***None run offs will not change with this project.***

d. Describe any pollutants likely to be in the storm water. ***None***

e. Describe any pollution control device(s) or management technique(s) to be used to reduce the amount of storm water generated, and devices to improve the quality of the storm water run-off prior to discharge. ***None***

f. Describe any new or improved storm water drainage system required to safely carry off storm water without flooding project site or neighboring areas down gradient. ***None***

6.10 Will this project use a new water intake device, or increase the use (flow) from an existing intake device? ***No new water intake device. Use existing water utility provider for the site.***

If yes, state:

a. the volume of water to be withdrawn, and; ***expected increase in water usage is 1-2 gallons per hour could be used from the water utility provider. Same water supply used for drinking and restrooms at the site already existing service.***

b. describe what will be done to prevent entrainment and/or entrapment of aquatic life by the intake device. ***N/A***

6.11 Will this proposed project result in a thermal discharge of water, or an increase in the flow or temperature of a current thermal discharge? ***No, the process doesn't have a thermal discharge of water.***

If yes, state: ***N/A***

a. the volume of the new flow or increase from the existing thermal discharge, both in flow and amount of heat;

b. how warm will the water be when it is discharged into a receiving waterway, discharge canal, or ditch, and what will be the difference in discharge temperature and ambient temperature (delta T) at various seasons of the year after all cooling water mechanisms have been applied to the hot water? ***N/A since there are no discharges***.

c. the equipment and/or management techniques that will be used to reduce the thermal load of the discharge water. ***N/A since there are no discharges.***

6.12 Will any proposed new discharge or change in existing discharge cause, or have potential to cause, or contribute to, the exceedance of applicable criteria appearing in the "State of Delaware Surface Water Quality Standards"?
NO, the process doesn't have a waste water discharge requirement.

If yes, explain: **N/A**

6.13 Describe any oils discharged to surface waters due to this proposed project. ***No oil discharges. All oils will be contained within concrete containments.***

6.14 Describe any settleable or floating solid wastes discharged to surface waters due to this project. ***No discharges to surface waters.***

6.15 Show evidence that the applicant has, or will have, the ability to maintain and utilize any water pollution control equipment listed in questions 5.5 through 5.14 in a consistently proper and efficient manner. (For example, provide operator license numbers, college transcripts and/or training courses and summary of prior experience with this pollution control equipment of person(s) responsible for pollution control equipment, and/or provide copies of contracts with pollution control firms.) ***The process doesn't have any waste water discharge requirements therefore this section is not applicable.***

6.16 Estimate the amount of water to be used for each specified purpose including cooling water. State daily and maximum water use in the unit of gallons per day for each purpose and source of water. State if water use will vary with the seasons, time of day, or other factors. ***Process will use 48 gallons max per day, lab will use 50 gallons per day. The process doesn't utilize water for cooling. The average sanitary site water usage is currently 450 gallons per day. With the additional employees we expect the usage to go up to ~2,500 gallons per day, Therefore the total water usage for the site will be 2,600 gallons per day. M-F. On weekends/holiday the water usage with vary from 400 -2,600 gallons per day.***

6.17 Identify the source of water needed for the proposed project, including potable water supplies. ***Nothing outside the existing potable water sources.***

6.18 Are wells going to be used? ***No, all water needs will be existing potable water provided by utility company.***

If yes*:* ***N/A***

a. Identify the aquifer to be pumped and the depth, size and pumping capacity of the wells.

b. Has a permit been applied for to do this?

c. How close is the proposed well(s) to any well(s) on adjacent lands?

Solid Waste

6.19 Will this project result in the generation of any solid waste?
Yes, the process will produce solid waste.

If yes, describe each type and volume of any solid waste (including biowastes) generated by this project, and the means used to transport, store, and dispose of the waste(s). ***The solid waste will consist of powdered limestone that is unable to be reclaimed with volumes of less than 150 tons per year. The process will need to dispose of broken pallets, paper bags, poly supersacks, card board sheets, plastic sheets and household waste. These items will all be recycled if possible by working with local recycling and/or waste management companies. The total waste items outlined above is expected to be less than 100 tons per year.***

6.20 Will there be any on-site recycling, re-use, or reclamation of solid wastes generated by this project? ***YES***

If yes, describe: **Unadulterated** ***ground limestone will be reprocessed back into as part of the recycle and reclaim system. All plastic, wood, paper, poly sacks etc..., will be recycled by working with local vendors and/or waste management companies.***

6.21 Will any waste material generated by this project be destroyed on-site?
No, the process will not have the ability to destroy any waste on site.

If yes, how will that be done? ***N/A***

Hazardous Waste

6.22 Will this proposed project result in the generation of any hazardous waste as defined by the "Delaware Regulations Governing Hazardous Waste"?
No, all the materials used on site have been reviewed with the local agency and the regulations online to confirm they are not categorized as hazardous materials.

If yes, identify each hazardous waste, its amount, and how it is generated: ***N/A***

6.23 Describe the transport of any hazardous waste and list the permitted hazardous waste haulers that will be utilized. ***This section doesn't apply since the site will not have any hazardous waste.***

6.24 Will the proposed project cause the applicant to store, treat, and/or dispose of hazardous waste?
No, the process will not use, contain or generate any hazardous waste materials.

If yes, describe: ***N/A***

6.25 Does the applicant currently generate any hazardous waste at this site?
No per the owner.

If yes, describe: ***N/A***

Habitat Protection

6.26 What is the current use of the land that is to be used for the proposed project? ***Warehousing and distribution center.***

6.27 Will the proposed project result in the loss of any wetland habitat? ***No, the project will not disturb any wetland habitats. Scope will be limited to within 20' of the existing 82,000 square foot building.***

If yes, describe: ***N/A***

6.28 Will any wastewater and/or stormwater be discharged into a wetland? ***NO, the process doesn't have any waste water discharge requirements.***

If yes, will the discharge water be of the same salinity as the receiving wetlands? ***N/A***

6.29 Will the proposed project result in the loss of any undisturbed natural habitat or public use of tidal waters? ***No, the project will not disturb any wetland habitats. Scope will be limited to within 20' of the existing 82,000 square foot building.***

If yes, how many acres? ***N/A***

6.30 Do threatened or endangered species (as defined by the DNREC and/or the Federal Endangered Species Act) exist at the site of the proposed project, or immediately adjacent to it? ***No, Owners to is willing to provide in writing if needed and the project will not pose any treats.***

If yes, list each species: ***N/A***

6.31 Will this proposed project have any effect on these threatened or endangered species (as defined by the DNREC and/or the Federal Endangered Species Act). ***No, 100% closed loop process and all materials will have full containments.***

If yes, explain: ***N/A***

6.32 What assurances can be made that no threatened or endangered species exist on the proposed project site*?* ***All processing will be 100% contained and the process***

is a closed loop system. Even if there was an upset no danger would exist given the product is a naturally occurring mineral (Calcium Carbonate). Food Grade oils will be used and be contained in basins if an upset occurs.

6.33 Describe any filling, dredging, or draining that may affect nearby wetlands or waterways. ***The scope of the project doesn't include any of the items outlined above.***

6.34 If dredging is proposed, how much will occur and where will the dredged materials go for disposal? ***N/A***

Other Environmental Effects

6.35 Describe any noticeable effects of the proposed project site including: heat, glare, noise, vibration, radiation, electromagnetic interference, odors, and other effects. ***Noise will be generated as part of the process, but all the noisy equipment will be contained within buildings. If the noise exceeds allowable levels engineering controls will be installed as needed however none is expected.***

6.36 Describe what will be done to minimize and monitor such effects. ***Perform noise surveys outside the property lines and document the results. Correct issues as needed.***

6.37 Describe any effect this proposed project will have on public access to tidal waters. ***None***

6.38 Provide a thorough scenario of the proposed project's potential to pollute should a major equipment malfunction or human error occur, including a description of backup controls, backup power, and safety provisions planned for this project to minimize any such accidents. ***If a major upset were to occur dusting could happen outside the building. However, the dust in powdered limestone used in food and pharmaceutical products. Natural occurring dust from the air possess a greater threat to the environment. At worst case 400-500 pounds of dust emission could occur if there was a complete failure of a pipe used to transfer the materials. The material is inert and will have no environmental impacts is an upset occurs. It's a natural occurring mineral that can be introduced to the surrounding environment without any negative impacts human or other living things. The material is used in food and pharmaceutical products. Moreover, calcium carbonate is used to treat soils in the agricultural industry and used as a food supplement to various animals.***

6.39 Describe how the air, water, solid and hazardous waste streams, emissions, or discharge change in the event of a major mechanical malfunction or human error. ***Dust from the process will settle on the ground and have zero effect to the air or ground other than a visible cloud if a concentrated upset occurs. Limestone is used in water treatment plants and exists naturally in water so no anticipated issues. The site will not have any hazardous waste streams.***

PART 6B

ENVIRONMENTAL OFFSET PROPOSAL REDUCTION CLAIM

Is applicant claiming the right to have a reduced offset proposal due to past voluntary improvements as defined in the "Regulations Governing Delaware's Coastal Zone"? ***No, we are a new operation, so this doesn't apply.***

If yes, provide an attachment to the application presenting sufficient tangible documentation to support your claim. ***N/A***

PART 6C

ENVIRONMENTAL OFFSET PROPOSAL

If the applicant or the Department finds that an Environmental Offset Proposal is required, the proposed offset project shall include all the information needed to clearly establish:

A. A qualitative and quantitative description of how the offset project will "*clearly and demonstrably"* more than offset the negative impacts from the proposed project.

Dust Emissions - No, offset should not be required since the limestone dust generated from the process in 100% recycled (process is 100% closed loop system with dust collection) and all dust becomes part of the product stream and therefore no emissions are generated. See attached process flow diagram.

Natural Gas Air Heater - Offset for the 5 million BTU Natural Gas fired air heater is required per CZA requirements. Therefore, Essential Minerals will be purchasing emission 3 emission credits from the Department of State Division of Small Business, Development & Tourism.

The authority utilizes a ratio of 1.3:1 to ensure adequate environmental offsets. As reported in the Air Quality emissions table provided in table 6.1 above the total emissions to air from the natural gas combustion is equal 2.03 tons per year. Utilizing the 1.3:1 ratio, an environmental offset proposal for the natural gas combustion must offset at least 2.64 tons of air emissions per year. As stated above we will purchase 3 emission reduction credits from the Department of State Division of Small Business, Development & Tourism to more than offset the impacts.

See attached agreement letter for the purchase of Emission Reduction credits (ERCs) from the Department of State Division of Small Business, Development & Tourism. The purchase of 3 (3) non-ozone season credits (specifically 1 NOx and 2 VOC non-ozone season credits).

B. How and in what period of time the offset project will be carried out. ***N/A***

C. What the environmental benefits will be and when they will be achieved. ***N/A***

D. What scientific evidence there is concerning the efficacy of the offset project in producing its intended results. ***N/A***

E. How the success or failure of the offset project will be measured in both the short and long term. ***N/A***

F. What, if any, negative impacts are associated with the offset project. ***N/A***

G. How the offset will impact the attainment of the Department's environmental goals for the Coastal Zone and the environmental indicators used to assess long-term environmental quality within the Coastal Zone. ***The purchased credits will offset will benefit the department by gaining 0.36 offset credits in the bank because of the purchase of the 3 credits minus the required offset of 2.64.***

Additional Offset Proposal Information for the Applicant

1. The offset proposals must "*clearly and demonstrably*"[1] more than offset any new pollution from the applicant's proposed project. The applicant can claim (with documentation) evidence of past voluntary environmental investments (as defined in the Regulations) implemented prior to the time of application. Where the Department concurs with the applicant that such has occurred, the positive environmental improvement of the offset proposal against the new negative impact can be somewhat reduced.

2. The applicant must complete the Coastal Zone Environmental Impact Offset Matrix. This matrix can be found on the CZA web page (http://www.dnrec.delaware.gov/Admin/CZA/CZAHome.htm, or by clicking on this link. On page one, the applicant must list all environmental impacts in the column labeled "Describe Environmental Impacts." In the column to the immediate right, the applicant should reference the page number of the application or attachment which documents each impact listed. In the "Describe Environmental Offset Proposal" column, applicant must state what action is offsetting the impact. The offset action shall be referenced by page number in the column to the right to show how the offset will work. The applicant shall not utilize the far right column. *Please ensure the matrix is complete, detailed, and as specific as possible, given the allotted space. Also, thoroughly proof-read to ensure there are no spelling or grammatical errors.* The applicant must submit a completed matrix both in hardcopy and electronic form. ***Offset matrix attached.***

3. Please note: the entire offset proposal, including the matrix, shall be available to the public, as well as the evidence of past voluntary environmental enhancements.

[1] For purposes of this requirement, the DNREC will interpret the phrase "clearly and demonstrably" to mean an offset proposal that is obviously so beneficial without detailed technical argument or debate. The positive environmental benefits must be obviously more beneficial to the environment than the new pollution that minimal technical review is required by the Department and the public to confirm such. The total project must have a positive environmental impact. The burden of proof is on the applicant.

PART 7

ECONOMIC EFFECTS

Construction

7.1 Estimate the total number of workers for project construction and the number to be hired in Delaware. ***10 -15 construction workers throughout the entire project.***

7.2 Estimate the weekly construction payroll. ***The estimated construction payroll will average $30,000 per week over the duration of the construction project.***

7.3 Estimate the value of construction supplies and services to be purchased in Delaware. ***Total estimated value of construction supplies and services purchased in Delaware will be $850,000 – $1,000,000.***

7.4 State the expected dates of construction initiation and completion. ***January 2018 through May 2018.***

7.5 Estimate the economic impact from the loss of natural habitat, or any adverse economic effects from degraded water or air quality from the project on individuals who are directly or indirectly dependent on that habitat or air or water quality (e.g. commercial fishermen, waterfowl guides, trappers, fishing guides, charter or head boat operators, and bait and tackle dealers). ***The project will not have any impact to habitat or adverse effects.***

Operations

7.6 State the number of new employees to be hired as a direct result of this proposed project and how many of them will be existing Delaware residents and how many will be transferred in from other states. ***Two employees transferred in and an additional eight employees will all be hired locally within one year. Additional 5 later total 15.***

7.7 If employment attributable to the proposed project will vary on a seasonal or periodic basis, explain the variation and estimate the number of employees involved. ***The business isn't typically seasonal, but we will have raw material deliveries 3-4 times per year. During this 1-2-week periods we will contract a third party for 15-20 additional workers to help unload and store our raw materials in the warehouse.***

7.8 Estimate the percent distribution of annual wages and salaries (based on regular working hours) for employees attributable to this project:

Wage/salary	Percent of employees
<$10,000	
$10,000-14,999	
$15,000-24,999	
$25,000-34,999	
$35,000-49,999	***35***
$50,000-64,999	***35***
$65,000-74,999	***10***
$75,000-99,999	***7***
>$100,000	***13***

7.9 Estimate the annual taxes to be paid in Delaware attributable to this proposed project:

State personal income taxes:	**$ 200,000**
State corporate income taxes	**$ 167,000**
County and school district taxes:	**$ 21,000**
Municipal taxes:	**$ 110,000**

PART 8

SUPPORTING FACILITIES REQUIREMENTS

Describe the number and type of new supporting facilities and services that will be required as a result of the proposed project, including, but not limited to: ***Upgrade to Natural Gas service nothing else needed for the existing site.***

a. Roads

b. Bridges

c. Piers and/or docks

d. Railroads

e. Microwave towers

f. Special fire protection services not now available

g. Traffic signals

h. Sewer expansion

i. Energy related facilities expansion

j. Pipelines

PART 9

AESTHETIC EFFECTS

9.1 Describe whether the proposed project will be located on a site readily visible from a public road, residential area, public park, or other public meeting place (such as schools or cultural centers). ***The project/site is located within an industrial park area visible from access roads to the area.***

9.2 Is the project site location within a half mile of a place of historic or scenic value? ***Not to our knowledge.***

9.3 Describe any planned attempt to make the proposed facility aesthetically compatible with its neighboring land uses. Include schematic plans and/or drawings of the proposed project after it is complete, including any landscaping and screening. ***No additional landscaping or screening will be added to the site for the project. See attached drawings to see the silos and equipment to be installed outside the building on the north side.***

PART 10

EFFECTS ON NEIGHBORING LAND USES

10.1 How close is the nearest year-round residence to the site of this proposed project? ***Half of mile.***

10.2 Will this proposed project interfere with the public's use of existing public or private recreational facilities or resources? ***No, located in an industrial park.***

10.3 Will the proposed project utilize or interfere with agricultural areas? ***No, located in an industrial park.***

10.4 Is there any possibility that the proposed project could interfere with a nearby existing business, commercial or manufacturing use? ***No, located in an industrial park. All activities will be like what other businesses are doing in the area.***

END OF APPLICATION

ATTACHEMENTS TO FOLLOW